

# Nutrition and Physical Activity

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For more information about CDC's nutrition and physical activity program,  
visit [www.cdc.gov/nccdphp/dnpa](http://www.cdc.gov/nccdphp/dnpa)



## Changing the Worksite Environment

### Public Health Problem

In Colorado, the obesity rate among adults increased by 141 percent from 1990 to 2002. Today, nearly half of the state's adults are overweight or obese. Efforts to address this issue by promoting healthy eating and physical activity should focus on the environments where people spend a significant amount of their time, such as their places of employment. However, businesses and other organizations have generally lacked both resources and motivation to implement wellness projects themselves.

### Taking Action

Colorado's Worksite Resource Kit provides employers with resources to implement worksite wellness initiatives, regardless of the size of the worksite. In developing this kit, the Colorado Physical Activity and Nutrition (COPAN) Program relied on survey data collected from 716 organizations around the state on physical activity, nutrition, and wellness programs available to employees. Divided into four sections - health education, physical activity, healthful eating, and worksite environment - the kit outlines for employers how to plan, assess, and successfully implement physical activity and nutrition interventions, including information on the importance of each step and the availability of additional information resources.

The Worksite Resource Kit Program was launched at the Colorado Worksite Wellness Summit in November 2003. Attendees representing 63 organizations from across the state received a kit and instructions on its use. A number of additional organizations have since received kits. In addition, mini-grant recipients are now implementing programs that include informational health meetings, preventive wellness screenings, healthy cooking demonstrations, and physical activity events. Other recipients have made stairway improvements to encourage walking and now provide private rooms for nursing mothers.

### Implications and Impact

Successful nutrition and physical activity outcomes from this program, such as a high level of employee interest and/or satisfaction regarding worksite activities, could result in employees making positive changes in their lives and in those of their families. For their part, employers should increasingly see the kit and other workplace interventions as a way to address the economic cost of overweight and obesity - decreased productivity, increased absenteeism, lower morale, and higher health insurance claims.

### Contact Information

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<http://www.cdc.gov/nccdphp/exemplary>

# Massachusetts

## Improving Children's Nutrition and Physical Activity Choices

### Public Health Problem

Nearly a quarter of all high school students in Massachusetts are overweight or at risk of becoming overweight. Through school-based efforts to encourage better nutrition and increased physical activity among younger children, the problem of overweight and the related risk of chronic diseases can be addressed preemptively.

### Taking Action

5-2-1 Go! (eat 5 servings of fruits and vegetables daily, limit screen time to no more than 2 hours a day, and get at least 1 hour of physical activity daily) is a school-based overweight prevention initiative in Massachusetts middle schools that aims to improve eating habits, increase physical activity, and decrease sedentary activities like watching TV - all through changes to core curriculum and existing school policies. The program has two main components that work together to make positive changes in both individual behaviors and organizational decision making. The first component is the School Health Index (SHI), a self-assessment and planning guide developed by CDC that involves teachers, parents, students, and the community in evaluating school policies on health and safety, and guides them in developing a plan to improve them. The second component is Planet Health, a curriculum program developed by the Harvard School of Public Health that weaves important health themes into physical education, language arts, math, science, and social studies.

### Implications and Impact

Based on the positive response to 5-2-1 Go!, Blue Cross and Blue Shield of Massachusetts (BCBSMA) is offering a number of schools an enhanced version of its Healthy Choices after-school program, which now uses both the SHI and Planet Health, to improve nutrition and physical activity. Additional regional coordinators and an evaluator have been hired, and BCBSMA has awarded mini-grants to schools to support implementation of these enhancements.

In addition, the results of a recent evaluation of 5-2-1 Go! schools will help better target interventions that promote walking to school as a way to increase physical activity. Another evaluation of schools in the program showed that higher rates of vending machine and fast food restaurant use among students are associated with higher sugar-sweetened beverage consumption. These results can bolster the case for providing students with healthier food choices at school.

### Contact Information

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# Massachusetts

## Women Help Each Other Follow a Healthy Path by Joining Social Support Group

### Public Health Problem

In rural Ware, Massachusetts, women needed help improving their health at a price they could afford. They also needed health advice. The state's Women's Health Network, which offers WISEWOMAN services, created the Women's Health Support Group for network members.

### Taking Action

Each month, women attend group meetings for health tips and help in managing blood sugar, blood pressure, and cholesterol. Meetings also offer hands-on activities such as swapping and tasting recipes and cooking healthy meals. Support group members who have weight problems or high blood pressure, cholesterol, or blood sugar levels are referred to the WISEWOMAN Program, while WISEWOMAN participants who want additional support are also referred to the support group. The support group makes sure that the interests of the participating women drive the group's agenda. Together, WISEWOMAN and the Women's Health Support Group are helping to ensure that underserved women in Ware get the care and support they need to adopt healthy lifestyles.

### Implications and Impact

The Massachusetts Women's Health Support Group is tailored to women's interests and needs and provides women with the tools they need to make healthy changes in their lives. It allows members to be leaders and role models for other women in the community. Many interpersonal benefits have resulted from the Massachusetts Women's Health Support Group. Women are motivated to make healthy changes as they are exposed to other women's success and encouragement. The willingness of members to share and help each other in a peer-led group promotes a setting where women can share. The support group and the Women's Health Network refer women to each other as a way of ensuring that underserved women in Ware can get the care they need to be healthy and fit. Each year, 250 women can be helped through the Women's Health Support Group, which serves Women's Health Network members including WISEWOMAN participants.

### Contact Information

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# North Carolina

## Creating Healthier Child Care Centers

### Public Health Problem

More than half of all adults in North Carolina are overweight or obese, and almost one-third of high school students are overweight or at risk of becoming overweight. Making positive changes in nutrition and physical activity behaviors among pre-school-age children is a way to preempt the growth of this epidemic in the state.

### Taking Action

The Nutrition and Physical Activity Self-Assessment for Child Care (NAP-SACC) is a pilot intervention in child care centers aimed at improving nutrition and physical activity environments and practices through self-assessment and targeted technical assistance. The intervention, a crucial part of the North Carolina Healthy Weight Initiative and created in partnership with the Center for Health Promotion and Disease Prevention, University of North Carolina at Chapel Hill, was implemented in six counties throughout the state, with two additional counties serving as controls. After completing a self-assessment, the child care center director, with assistance from a Child Care Health Consultant (CCHC), identified at least three areas for improvement. The CCHC and the center worked together over six to nine months to improve and enhance their respective center's environment using a resource manual and continuing education workshops developed by the NAP-SACC team. Three 30-minute workshops were developed by NAP-SACC that covered childhood overweight, healthy eating, and physical activity. Then, both quantitative and qualitative evaluations were performed to gauge the effectiveness of the NAP-SACC intervention.

After the centers assessed their nutrition and physical activity environments, technical assistance was provided on ways to make positive improvements, such as enhanced access to physical activity through purchase of additional equipment or creation of additional indoor/outdoor play space. With regards to nutrition, these improvements included activities such as increasing the availability of fruit and vegetables, reducing use of fried foods, reducing use of sugar-sweetened beverages, and introducing overall nutrition policies in individual centers.

### Implications and Impact

The NAP-SACC workshops were attended by 122 staff members from centers in six counties. An evaluation of the pilot concluded that NAP-SACC helps child care centers improve their nutrition and physical activity environments and policies, as demonstrated through the NAP-SACC self-assessment data as well as an analysis of interview and focus group data. The evaluation also suggested that nutrition and physical activity interventions benefit from parental involvement and linguistic inclusiveness.

Based on progress made through NAP-SACC, there are plans to establish the intervention in child care centers throughout the state, develop a large-scale evaluation of NAP-SACC to assess child-specific changes in behavior as a result of the project, and develop a similar project targeting infants.

### Contact Information

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<http://www.cdc.gov/nccdphp/exemplary>



# North Carolina

## Healthwise Partnership Promotes Physical Activity for WISEWOMAN Participants in Winston-Salem

### Public Health Problem

In many communities, underserved, at-risk women may not have opportunities to be physically active because of cost and access barriers to physical activity programs or facilities.

### Taking Action

The Healthwise program, funded by the Kate B. Reynolds Charitable Trust and the WISEWOMAN Program, provides health education, counseling, and referrals to at-risk WISEWOMAN clients. As part of their counseling, clients are encouraged to become more physically active. Community partners collaborated to offer Young Women's Christian Association (YWCA) scholarships to help women in need become more physically active. The scholarships allow women to purchase membership at a substantially reduced cost. Participants may purchase a one-month membership for \$5 versus the regular \$30 cost. Scholarships are incentives that encourage WISEWOMAN participants to engage in physical activity, and they recruit women into the program.

WISEWOMAN clients have their blood pressure and cholesterol levels checked at the Forsyth County Department of Public Health. Women receive counseling about healthy diets, physical activity, smoking cessation, and stress management. An individualized physical activity plan is developed for each client by the Healthwise program coordinator. After clients answer health questions and obtain physician approval to participate in the physical activity programs, YWCA scholarships can be offered.

Women who receive YWCA scholarships must attend an orientation to learn about the exercise equipment or attend classes at the YWCA. At a minimum, participants are required to engage in physical activity at least twice a week for a six-month period. The Healthwise coordinator monitors attendance and provides feedback and motivation for women at follow-up visits. WISEWOMAN offers ongoing support and motivation and fosters a supportive environment among participants.

### Implications and Impact

Through access to Healthwise and the YWCA, WISEWOMAN clients have opportunities to become more physically active, lose weight, increase their stamina, and better control their blood pressure and cholesterol levels. The program has removed cost and access barriers that were preventing underserved women in the community from being physically active. This outreach strategy has attracted more women to the WISEWOMAN Program. At the organizational level, partnerships were formed with other agencies and increased the chances that these services will be sustained in the community.

### Contact Information

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# Pennsylvania

## Involving the Community in Reducing Overweight

### Public Health Problem

A 2002 study conducted by the Pennsylvania Department of Health showed that 35 percent of a large statewide sample of eighth graders were at risk for being overweight or already were overweight. Recognizing that a significant percentage of students could be at risk for heart disease, diabetes, and other chronic conditions associated with overweight, the Pennsylvania Department of Health decided to update its longstanding growth screening program to more effectively measure students' growth patterns and their risk for overweight.

### Taking Action

In fall 2003, the Department of Health conducted a pilot of this updated growth screening program in 10 public and private schools, based on anthropometric measurements collected by school nurses using CDC's 2000 growth reference. These pilot schools represented urban, suburban, and rural districts as well as various grade and enrollment levels. Each school nurse used an updated program manual and one of three tools to determine BMI: 1) a table from CDC (Calculated BMI Values for Selected Heights and Weights for Ages 2 to 20 Years), 2) a BMI wheel, or 3) one of two computer programs including NutStat, a part of the Epi Info public-domain software package. Newly revised gender-appropriate growth charts from CDC were provided for plotting BMI-for-age percentiles. Nurses also received a sample letter they could use to inform parents of screening results.

During the pilot, department staff visited participating schools to observe school staff who were obtaining height and weight measurements, determining BMI, and plotting BMI-for-age percentiles. Department staff also provided technical assistance and verified the accuracy of measurements and calculations.

### Implications and Impact

The pilot screening program found that 38 percent of students tested were overweight or at risk of becoming overweight, which confirmed that overweight is a serious problem for the school-age population. In September 2004, the Department of Health announced that the revised growth-screening program would be implemented statewide. The revised procedures are voluntary for school year 2004-2005. Mandatory implementation will begin in 2005-2006 for grades K-4 and will expand to three additional grades each year until all 12 grades are included. Each school district and charter school will receive materials that provide guidance on proper height and weight measurement, calculation and plotting of BMI, and how to notify parents or guardians of screening results. This new screening procedure will help educate children and their parents about the risks of being overweight and bolster other initiatives promoting active lifestyles and healthy food choices.

### Contact Information

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# Washington



## Building a Healthy, Active Community

### Public Health Problem

Between 1990 and 2002, the obesity rate among adults in Washington State increased by 127 percent. Today, nearly three out of every five state residents is overweight or obese. Improved eating habits and increased physical activity are keys to reversing this trend, but in communities throughout the state, numerous barriers exist to making these healthful changes.

In Moses Lake, a small, central Washington city, there is a need for better access to healthy foods at home, at school, and in the workplace. In addition, Moses Lake, like other communities, needs additional resources to make physical activity safe and accessible for all its residents.

### Taking Action

A series of interventions in Moses Lake, known collectively as Healthy Communities Moses Lake, encourages good nutrition and physical activity behaviors through environmental and policy change. Both Moses Lake and Grant County, where Moses Lake resides, have adopted an overall Healthy Communities action plan. Specifically, the city has adopted a master plan to replace a railroad that runs through the downtown area with a path for biking and walking. The county adopted a plan for creating walking and biking trails alongside irrigation canals. New zoning ordinances in both the city and county require wider sidewalks that will increase accessibility for pedestrians and cyclists.

The city has incorporated the community garden project into its parks and recreation department work plan. The project is building capacity through integration with county nutrition activities and youth wellness team projects in the community as well as the development of a community-based oversight and planning group for the garden. The garden project has forged links with local school groups and chefs to make the garden both a food source and educational tool for the community.

In addition, to encourage good nutrition from birth, Healthy Communities aims to inform residents about proper breastfeeding practices as well as create supportive environments for nursing mothers throughout the community. Planned activities include meeting with local business representatives to discuss breastfeeding policies in the workplace, daycare provider workshops and continued educational forums, and various community advertising and promotion efforts.

### Implications and Impact

As a result of the positive steps Moses Lake is taking with regard to community nutrition and physical activity, the City of Mount Vernon has adopted a Healthy Communities action plan of its own as part of the City's comprehensive plan.

## Contact Information

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